

67,200-261
1999-529/30

What is claimed is:

1. A method for fabricating a microelectronic fabrication comprising:

providing a substrate;

forming over the substrate a spirally patterned conductor layer which terminates in a microelectronic structure formed within the center of the spirally patterned conductor layer, wherein the spirally patterned conductor layer forms a planar spiral inductor, and wherein the microelectronic structure formed within the center of the spirally patterned conductor layer further comprises a series of electrically interconnected sub-patterns.

2. The method of claim 1 wherein by employing the series of electrically interconnected sub-patterns within the microelectronic structure formed within the center of the spirally patterned conductor layer, the microelectronic structure is fabricated with an attenuated eddy current.

3. The method of claim 1 wherein the microelectronic structure is selected from the group consisting of a resistors, diodes, capacitors, bond pads and aggregates thereof.

4. The method of claim 1 wherein the microelectronic structure comprises a capacitor electrically connected with a bond pad.

67,200-261
1999-529/30

5. The method of claim 1 wherein the substrate is employed within a microelectronic fabrication selected from the group consisting of integrated circuit microelectronic fabrications, ceramic substrate microelectronic fabrications, solar cell optoelectronic microelectronic fabrications, sensor image array optoelectronic microelectronic fabrications and display image array optoelectronic microelectronic fabrications.

6. The method of claim 1 wherein the spirally patterned conductor layer is formed of a conductor material selected from the group consisting of non-magnetic metal, non-magnetic metal alloy, magnetic metal, magnetic metal alloy, doped polysilicon and polycide conductor materials, and laminates thereof.

7. The method of claim 1 wherein the spirally patterned conductor layer is formed in a geometric shape selected from the group consisting of a triangle, a square, a rectangle, a higher order polygon, an ellipse and a circle.

8. The method of claim 1 further comprising bonding upon the microelectronic structure a bond wire, wherein the bond wire has incorporated therein a minimum of one loop.

9. A microelectronic fabrication comprising:

a substrate;

a spirally patterned conductor layer formed over the substrate, wherein the spirally patterned conductor layer terminates in a microelectronic structure formed within the center of the spirally patterned conductor layer, wherein the spirally patterned conductor layer forms a planar spiral inductor, and wherein the microelectronic structure formed within the center of the spirally patterned conductor layer comprises a series of electrically interconnected sub-patterns.

10. The microelectronic fabrication of claim 9 wherein the substrate is employed within a microelectronic fabrication selected from the group consisting of integrated circuit microelectronic fabrications, ceramic substrate microelectronic fabrications, solar cell optoelectronic microelectronic fabrications, sensor image array optoelectronic microelectronic fabrications and display image array optoelectronic microelectronic fabrications.

11. The microelectronic fabrication of claim 9 wherein the microelectronic structure is selected from the group consisting of resistors, diodes, capacitors, bond pads and aggregates thereof.

12. The microelectronic fabrication of claim 9 wherein the microelectronic structure comprises a capacitor electrically connected with a bond pad.

67,200-261
1999-529/30

13. The microelectronic fabrication of claim 9 wherein the spirally patterned conductor layer is formed of a conductor material selected from the group consisting of non-magnetic metal, non-magnetic metal alloy, magnetic metal, magnetic metal alloy, doped polysilicon and polycide conductor materials, and laminates thereof.

14. The microelectronic fabrication of claim 9 wherein the spirally patterned conductor layer is formed in a geometric shape selected from the group consisting of a triangle, a square, a rectangle, a higher order polygon, an ellipse and a circle.

15. The microelectronic fabrication of claim 9 further comprising a bond wire bonded upon the microelectronic structure, wherein the bond wire has incorporated therein a minimum of one loop.